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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,066	11/09/2001	Tomohiro Ohzuru	5404-11	3858

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EXAMINER	
HARAN, JOHN T	
ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/991,066	OHZURU ET AL.
	Examiner John T. Haran	Art Unit 1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 28 January 2004.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 14 and 70-98 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 14 and 70-98 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 09 November 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 3/5/02.

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 3/25/02 has been considered by the examiner.

### ***Drawings***

2. The drawings are objected to because Figures 48, 57, 57, 58, 59, 63, and 64 all contain Japanese symbols. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. **The objection to the drawings will not be held in abeyance.**

### ***Claim Objections***

3. Claim 89 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 89 depends from claim 87, which already specifies the cover bag has rubber elasticity.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 14 and 70-98 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 is indefinite because it is unclear what the relationship is between the film with the electrode pattern and the laminated source material film. It appears from the figures and specification that the electrode pattern is formed at one end on one surface of the laminated source material film and then the laminated source material film with the electrode pattern formed thereon is wound around the axial core at least two times, however the language of the claim does not currently indicate such.

It is suggested to amend the electrode pattern forming step to read - - a step of forming an electrode pattern for one circumferential length of a tubular object at one end on one surface of the laminated source material film; - -. It is also noted that in the winding step and the heat-welding step that the phrase "the film with the electrode pattern" should be amended to read - - the laminated source material film with the electrode pattern formed thereon - -. It is also suggested to amend the to indicate that the heat-welding step forms the medium conveying belt since later claims refer to the medium conveying belt and it is never specified when the belt is formed. Additionally, "a tubular object" should be called - - a medium conveying belt - - since the method is directed to forming a medium conveying belt and not a tubular object.

Claim 72 is indefinite because it is unclear what the monolayer film is laminated to. It is suggested to add - - to a nonthermoplastic polyimide film - - at the end of the claim.

Claim 73 is indefinite because there is no antecedent basis for both a thermoplastic resin film and a thermoplastic polyimide film. It appears the claim should

be amended to read -- delivering the thermoplastic polyimide film and the nonthermoplastic polyimide film --.

Claim 74 is indefinite for similar reasons as claim 14. The claim should be amended to indicate that **another** electrode pattern is formed at the other end on the **opposite** surface of said **laminated source material film**; that the laminated source material film with **the electrode patterns formed thereon** is wound; and that the protective layer is wound two times **around the electrode pattern on the outermost circumferential surface**.

Claims 75-78, should be amended in accordance with claim 74, since they all have the same indefiniteness problems.

Claims 79-81 are indefinite because they depend upon claims 74-78 which require two electrode patterns on the laminated source material film and it is unclear which electrode pattern is being referred to in claims 79-81.

Claim 79 is also indefinite because there is a lack of antecedent basis for "said one layer". Is it referring to the protective layer? A layer of the laminated source material film? The entire laminated source material film? The claim needs to be amended to clarify what exactly has a hole formed in it and what is narrowed.

Claim 80 is also indefinite because there is a lack of antecedent basis for "said one layer". It is also unclear what the one layer is referring to. Additionally the film should be referred to as the laminated source material film.

Claim 81 is additionally indefinite because it is unclear what the "two layers" are.

Claims 85 and 86 are indefinite because it is confusing to call the surface roughness both Ra and Rz.

Claims 96-98 should be amended to refer to the film as the laminated source material film.

***Allowable Subject Matter***

6. Claims 14 and 70-98 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

7. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to suggest the claimed production method of a medium conveying belt, particularly the combinations of the step of forming an electrode pattern equivalent to one circumferential length of a medium conveying belt at one end on one surface of a laminated source material film and the step of winding the laminated source material film with the electrode pattern formed thereon at least two times around an axial core so that the electrode pattern forms the outermost circumferential surface.

Nishikawa et al (U.S. Patent 6,652,938) teaches a method of making a media transport belt wherein a laminated film comprising a nonthermoplastic polyimide layer has an electrode pattern formed on one surface and then the two ends of the laminated film are joined together to form the belt (Column 3, line 50 and Column 12, lines 31-52). There is no suggestion of winding the laminated film around an axial core at least two times and only forming the electrode pattern so that it is equivalent to a circumferential length of the finished belt.

Hayashi (U.S. Patent 6,374,184) and Tanno (U.S. Patent 6,419,411) both teach medium conveying belts with electrode patterns on the outer surface both do not suggest the claimed method of forming such a belt.

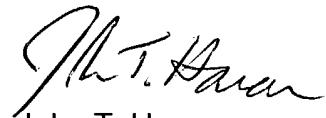
8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John T. Haran** whose telephone number is **(571) 272-1217**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John T. Haran  
Examiner  
Art Unit 1733